Backgrounder

September 1999

Center for Immigration Studies

High-Tech Trojan Horse

H1-B Visas and the Computer Industry

By Norman Matloff

During 1998, Congress and President Clinton came under enormous pressure from lobbyists for the computer industry who were demanding an increased quota for the H-1B work visa, under which tens of thousands of computer programmers and other professionals had been imported from abroad each year. The industry touted the increase as a temporary remedy for what they described as a desperate labor shortage. In spite of strong evidence disputing that claim, in October Clinton signed into law legislation implementing a near doubling of the quota during the next three years.

Many observers thought at the time that the H-1B issue would lay dormant for that three-year period. They were surprised when new H-1B legislation was introduced just a few months later, in the summer of 1999, by Sen. Phil Gramm (R-Texas), S.1440, and Rep. Zoe Lofgren (D-Calif.), H.R.2687. Yet these observers should not have been surprised at all; the industry actually had considered the 1998 legislation to be a mere warmup.

Ignoring Education

The official line at the time was that the increased quota was merely a stopgap solution to an alleged high-tech labor shortage, with the long-term solution being stepped-up efforts to train workers for the computer professions. With this goal in mind, just weeks after Clinton signed the H-1B bill, a special panel discussion was slated for MEPTECH II, a Silicon Valley trade conference focused on educational strategies to increase the number of university graduates in engineering. The panel included two representatives from industry, a university dean of engineering, a professor of computer science, and a representative of an electrical engineering professional society.

Yet in their presentations to this symposium on educational solutions to the claimed labor shortage, neither of the industry representatives mentioned education at all. Instead, they focused on justifying the industry's hiring of workers under the H-1B visa program. This seemed odd, not only because they were ignoring the education theme of the discussion, but even more so because they seemed to be fighting a battle they had already won. After all, Clinton already had signed the H-1B bill for which they lobbied so heavily.

This incident was highly portentous for the future of the role of H-1Bs in the industry. First, it once again cast doubt on the sincerity of industry claims that the long-run solution to the claimed labor shortage lies in education. Back in 1995, the industry also told Congress that H-1Bs were needed only until the laid-off defense industry programmers and engineers were retrained, a promise on which the industry never made good.

Second, the MEPTECH panel discussion offered the first hint that, rather than waiting the three-year duration of the 1998 bill before returning to Congress to discuss H-1B legislation, the industry would in fact be back in Congress right away with new demands concerning the hiring of foreign-national programmers and engineers. Further hints in this direction appeared intermittently during the next few

Dr. Norman Matloff is a professor of computer science at the University of California, Davis. His much more detailed analysis of the claimed IT labor shortage and the H-1B program is accessible at http://heather.cs.ucdavis.edu/itaa.html

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

months in the form of industry press releases, op-eds written by sympathetic government officials, and so on, culminating in the bills introduced in the summer of 1999 by Gramm and Lofgren.

The 1999 legislation, pending at this writing, actually is profoundly more far-reaching than what was enacted in 1998. These proposals are designed to give the industry a blank check, dispensing with quotas altogether.

The 1999 legislation, pending at this writing, actually is profoundly more far-reaching than what was enacted in 1998. Under the guise of responding to reports of widespread fraud in the H-1B program, the new proposals would create special categories — with an infinite cap, no limit on numbers of visas at all — for what ostensibly are the "better-quality" foreign programmers and engineers. In actuality, though, these proposals are designed to give the industry a blank check, dispensing with quotas altogether. And the claims that the new provisions would apply only to highly-talented workers, referred to as "geniuses" by Lofgren, are but a sham.

The Gramm bill would completely remove the H-1B quota for any worker who "has attained a master's degree or higher (or its equivalent) in a specialty related to the intended employment and receives wages (including cash bonuses and similar compensation) at an annual rate equal to at least $60,000." Lofgren's bill differs in some details. She would establish a new visa type, separate from the H-1B, with the above provisions, but would require only a bachelor's degree, not a master's. Also, Lofgren's bill as it currently reads would apply only to new graduates. However, the latter provision is likely to be removed during negotiations in combining her bill with Gramm's, and in essence Lofgren's bill is the same as Gramm's, lifting quotas entirely for this new type of work visa.

No Geniuses

Lofgren unabashedly refers to workers making $60,000 as "geniuses." But her $60,000 level is nowhere near genius-level salaries for this profession, which approach and often exceed $100,000. On the contrary, the proposed $60,000 threshhold actually matches the median salary nationwide in 1998 for professional staff in information technology (IT), according to the annual Datamasters survey. And this median includes all education levels; the figure for those with a master's degree would be significantly higher. Even if one restricts attention to new graduates, $60,000 would be at best average for new master's degree holders hired by most big firms. In other words, rather than signifying outstanding talent, as claimed by the authors of these bills, the $60,000 threshhold is simply average.

Gramm would have us believe that the requirement of a master's degree at least imposes some degree of quality control. Both Gramm and Lofgren also point to the fact that relatively few American students pursue graduate work after finishing their bachelor's degrees in high-tech. But this is highly misleading.

First of all, in terms of specific technological skills acquired, a postgraduate degree is not needed in order to work in the computer industry. Though research experience gained at a top university has some "cultural" value, for most students at most schools a master's degree does not add much value to a worker's productivity. Microsoft founder Bill Gates does not even have a bachelor's degree, let alone a master's. The same is true for Oracle founder Larry Ellison, Apple/Pixar founder Steve Jobs, and countless others. (I was a software developer in industry, later became a computer science professor conducting research and teaching in the field, and yet have no formal training in computer science at all.) Undergraduate domestic students in bachelor's curricula in computer science know this, and thus very few of them — including the very best — continue their education through a master's or higher.

Second, one certainly need not be a "genius" to earn a master's degree. On the contrary, most holders of bachelor's degrees in computer science would qualify for hundreds of master's programs nationwide, if they were interested in advanced study. Therefore, a master's degree does not signify special talent.

Domestic students know that a master's is of little long-term value and thus forego graduate study, but the foreign students are attracted by the prospect of using U.S. graduate study as a stepping stone to immigration. Thus many small private colleges, having discovered that foreign students in master's programs comprise an excellent revenue source, actively recruit abroad, and set their admissions standards attractively low. If legislation is passed that allows an unlimited number of work visas for holders of master's degrees, these schools would expand their master's programs, and many schools would

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

establish new such programs. None of this would increase the number of "geniuses" joining our workforce.

A Litany of Loopholes

Though these legislators would have us believe that their bills are designed to avoid the atrocious problems of salary exploitation seen in the past among H-1B workers, the fact is that the new proposals contain enormous loopholes under which exploitation would continue as usual.

For instance, it is crucial to keep in mind that the $60,000 median for IT workers tabulated in the Datamasters survey cited above is purely for salary — in stark contrast to the $60,000 figure in the proposed legislation, which includes nonsalary compensation. Gramm's bill describes the latter as "cash bonuses, and similar compensation," and Lofgren's includes "stock options, bonuses and other similar compensation." In other words, the $60,000 threshhold proposed in these bills actually represents a level of compensation that is below average for IT workers.

And how is total compensation for a foreign worker to be calculated under these bills? The values of bonuses and stock options are unpredictable. Bonuses may or may not materialize, and stock options could end up worthless. Thus employers would have to be allowed to merely estimate the values of such compensation. Given the industry's abysmal track record — an audit by the Department of Labor found that a fifth of H-1B employers were not even paying the salaries they had promised in their applications for the visa — we can be sure that many employers would make greatly exaggerated "estimates" for such nonsalary compensation, in order to meet the magic number of $60,000.[1] And if the term "similar compensation" is interpreted to include fringe benefits such as health and dental insurance, the proposed legislation's inclusion of nonsalary compensation makes the $60,000 bar even more of a charade.

Moreover, salaries in the high-tech professions have been rising at a rate of nearly 10 percent per year. Yet these legislators have not included any provision in their bills to adjust the $60,000 threshhold as nationwide salaries rise. The $60,000 level would be the equivalent of less than $50,000 within two years, and would continue to erode after that.

Employers in regions with high costs of living would have especially high potential to exploit the foreign workers. Assuming that Lofgren's bill is indeed changed to conform to Gramm's, the proposed legislation would be of huge benefit to employers in Lofgren's Silicon Valley district, which has an astronomical cost of living. It is so expensive to live there that a four-person family there actually qualifies as low-income for the purposes of federal housing assistance if its income is as much as $53,100 — not far below the $60,000 threshhold Lofgren describes as "genius" pay.[2] Lofgren herself has stated that the mean high-tech salary in Silicon Valley is in the mid-$80,000 range, and her own press secretary blurted out that $60,000 is considered just "peanuts" wages in that region.[3]

A Trojan Horse

Meanwhile, during negotiations on these bills, employers in low cost-of-living regions will likely demand that the provision "master's degree *and* $60,000" be changed to "master's degree *or* $60,000." They would argue such a change is needed because the $60,000 cutoff is unreasonably high relative to salaries in their regions. They would also point out a precedent, in that the condition "master's degree *or* $60,000" appears in the definition of "H-1B dependency" in the 1998 law.

There is no desperate software labor shortage. Average wage increases for programmers have been mild, 7 percent in 1997 according to the Bureau of Labor Statistics, and similar figures are seen in the private Datamasters survey (about 8 percent in 1998). These are simply not consistent with the claim of a desperate software labor shortage.

Furthermore, recall that the language in Gramm's legislation is actually "master's degree or its equivalent," not just "master's degree." (Again, such language has a precedent in the H-1B dependency section of the 1998 law.) An employer could state that two years of work experience are equivalent to a master's. So, quite contrary to the legislators' claim that the special, unlimited-numbers categories they propose will apply only to those workers who are of especially high quality, the practical effect could be merely that the worker have at least two years of experience.

In other words, by making these two seemingly innocuous changes (replacing "and" by "or," and adding "or its equivalent"), both of which have some precedent

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Table 1. Percent of Software Applicants Hired

American Management Systems	2 percent
Broderbund Software	1 percent
Cohesive	2 percent
Datascan	5 percent
Deltanet	4 percent
ECbridges	2 percent
Flashpoint Tecnology	2 to 5 percent
H.L. Yoh	4 percent
Inktomi	< 5 percent
Microsoft	2 percent
Net Perceptions	2 percent
New England firm	1 percent
Qualcomm	4.5 percent
Radiant Systems	< 1 percent
Red Hat Linux	< 1 percent

in H-1B law, the authors of these bills have secreted a Trojan horse, which would flood the labor pool with unlimited numbers of mediocre workers, instead of the "geniuses" they have promised.

Foreign Workers Aren't Needed

As we have seen, the proposals by Gramm and Lofgren to remedy widespread abuse of the H-1B program will not have a remedial effect. But worse yet, they are distracting attention from the central issue — we do not need so many foreign high-tech workers in the first place. There is no desperate software labor shortage. Average wage increases for programmers have been mild, 7 percent in 1997 according to the Bureau of Labor Statistics, and similar figures are seen in the private Datamasters survey (about 8 percent in 1998). These are simply not consistent with the claim of a desperate software labor shortage. If employers were desperate, they would be willing to pay wage premiums much higher than 7 or 8 percent. By contrast, surveyors and dieticians recently saw their salaries increase far more than programmers, beating inflation by 20 percent and 17 percent, respectively.[4] And a butter shortage upped the price of Grade AA by 73 percent in the past year.[5]

Employers only hire about 2 percent or so of their software applicants. If employers were so desperate to hire, they could not afford to be so picky. Table 1 shows typical examples of hiring rates, for companies large and small, across the nation.[6]

Employers admit that they reject most of their applicants for software positions without even an interview, but claim that the vast majority are not "qualified," because these programmers do not have work experience in some new software skill, say the Java programming language. This claim is unwarranted, because any competent programmer can become productive in a new language within weeks. But even taking the employers' claim at face value, it is significant that they only hire a fraction of those who do have the desired software skills. This can be seen in another measure, the offer rates, as follows.

Here I am defining the offer rate to be the ratio of the number of offers made to the number of applicants brought in for in-person interviews. This is significant in that an applicant who is invited for an interview has already passed two levels of screening, first at the resume stage and then in the telephone interview, and thus does have the specific software skills which the employer wants. Yet even then the employers are very selective, as seen in Table 2.[7]

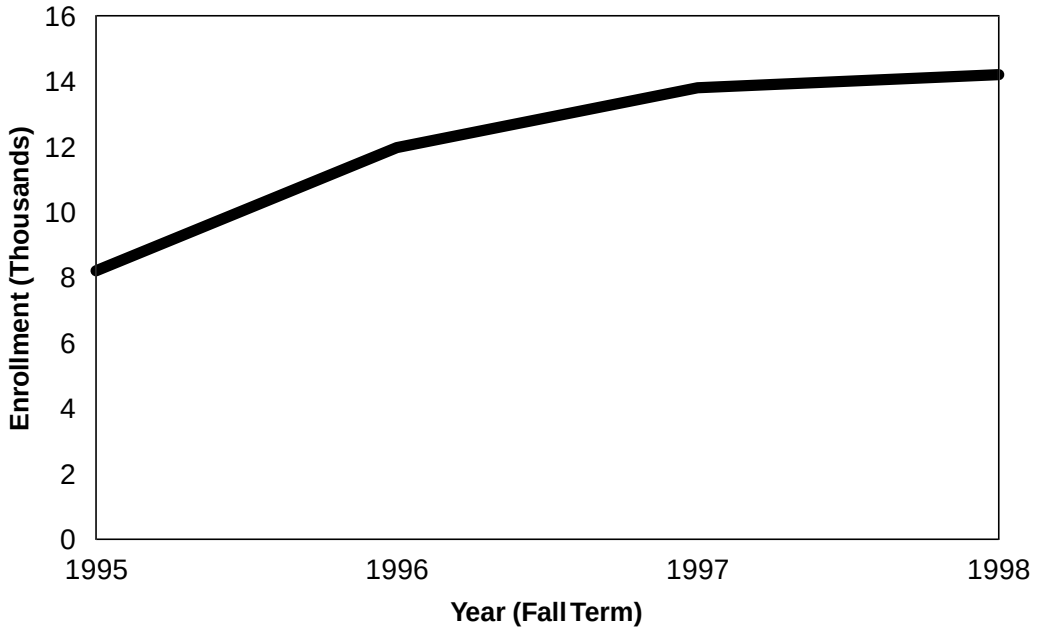
The industry lobbyists claim their need for H-1B workers is due to a lack of interest and ability among American young people to enter high-tech fields, and cite a 12 percent decline in university engineering curricula during the period 1990-1996. But this is highly misleading, in several important ways. First, the lobbyists have cleverly chosen their time window to include the early 1990s period of defense downsizing, even though the industry itself has stated that the large layoffs at the time caused reduced student interest in technical fields. Second, it is inappropriate to track engineering enrollment in general, since the H-1Bs are concentrated in the computer field. And third, after the job market improved

Table 2. Percent of Interviewees Made Offers

American Management Systems	< 25 percent
Aspect Technologies	20 percent
Broderbund Software	30 percent
City of San Jose (Civil Service)	10 percent
Cohesive	20 percent
Datascan	12 percent
Deltanet	possibly as much as 40
ECbridges	20 percent
ESP	10 percent
Flashpoint Tecnology	25 to 30 percent
High-Tech Job Fairs	as few as 6 percent
Inktomi	50 percent
Microsoft	25 percent
Net Perceptions	50 percent
New England firm	25 to 30 percent
Quintet	less than 5 percent
Radiant Systems	less than 5 percent

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

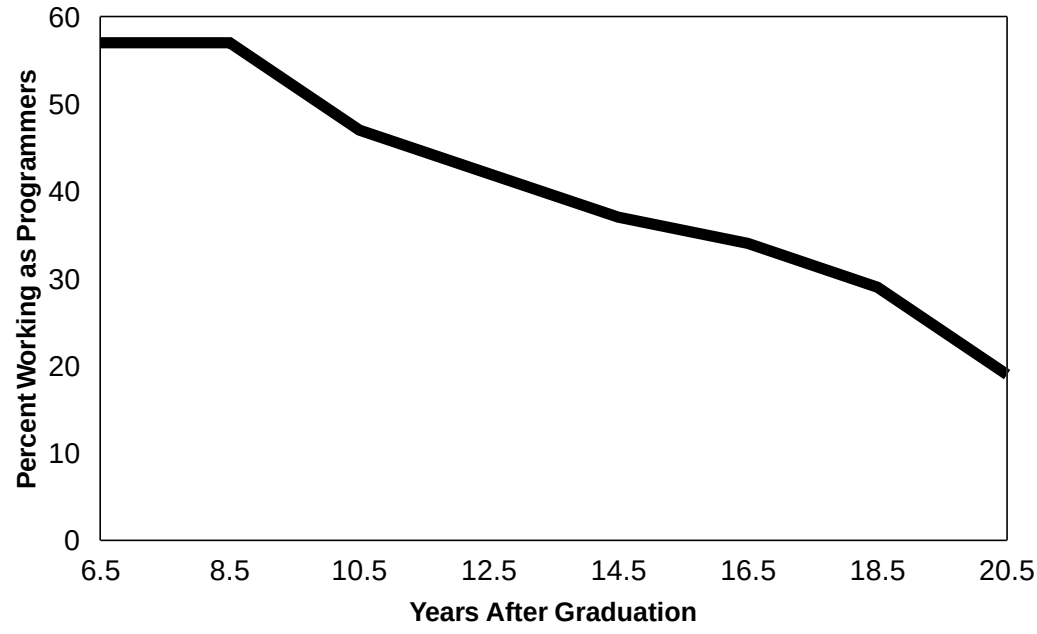
Figure 1. New CS Enrollment in the United States



around 1994, computer science enrollment began to rise sharply, and has more than doubled in the last three years, thus annihilating the industry claim that "Johnny can't/won't do computer science."

The Department of Commerce, after having learned that its 1997 report on the IT labor market had too hastily duplicated the industry lobbyists' analysis, released a new report in 1999.[8,9] Their position now is that the data are not clear as to whether there is an IT labor shortage — a shift in stance nothing less than a sea change for a body that considers industry, rather than labor, to be its clientele. Moreover, this new report frankly discusses the fact that firms in this field hire only minuscule percentages of their applicants, as we have seen earlier,

Figure 2. Attrition Rates for CS Grads Working as Programmers



LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Table 3. Years of Programming Experience to Qualify for Senior Position

Best Buy	Senior Programming Analyst	2 years
Compaq	Senior Software Engineer	3 to 5 years
Geoworks	Senior Software Engineer	5 years
Intel	Senior Software Engineer	5 years
Lotus	Senior Software Engineer	5 years
Oracle	Senior Software QA	4 years
Sun Microsystems	general technical	6 years

and it also describes the problems of age discrimination in this profession, which we discuss next.

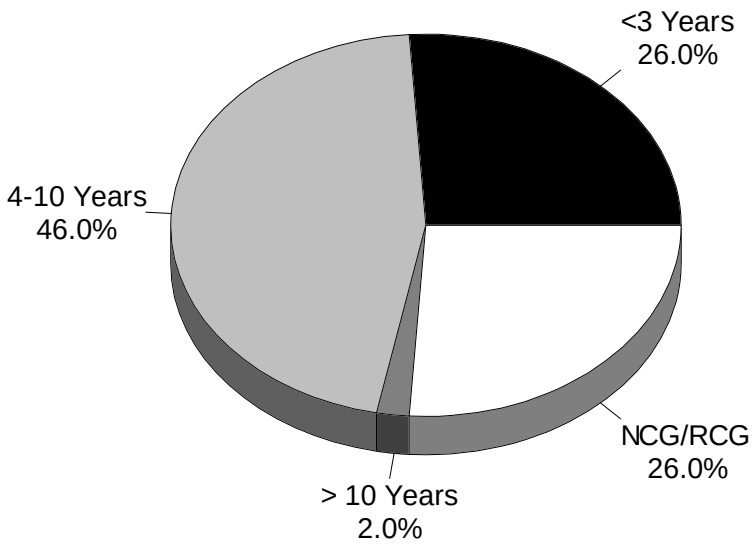
Age Discrimination

There is no shortage of programmers. Instead, the problem is that employers are not willing to hire them. A young worker (foreign or domestic) with the hottest new software skills can find work easily, but most older programmers without the new skills face enormous obstacles. Because most employers shun the older programmers, careers in this field tend to be short-lived. It is very difficult for most programmers to get programming work after age 40; some still work in nonprogramming but computer-related jobs such as customer support, marketing and so on, while many leave the computer field altogether. Figure 2 shows the percentage of computer science graduates working in software development various numbers of years after they finish school, according to data extracted from the National Survey of College Graduates.

These attrition rates are striking. Five years after finishing college, about 60 percent of computer science graduates are working as programmers; at 15 years the figure drops to 34 percent, and at 20 years — when most are still only age 42 or so — it is down to 19 percent. Clearly part of this attrition is voluntary, but most are forced to seek other work when they see the handwriting on the cubicle wall: Employers do not want to hire older programmers.

It should be noted that other technical professions do not show this rapid decline of work in their field. For example, consider civil engineering majors. Six years after graduation, 61 percent of them are working as civil engineers, and 20 years after graduation, the rate is still 52 percent; compare this to the decline for computer science majors from 57 percent to 19 percent seen above. True, some computer science majors eventually go into management and so on, but the same is true for civil engineers. Careers in programming are far shorter than in civil engineering, even though both fields are technical and require attention to detail. The difference is that skill sets change rapidly in programming, but not in civil engineering. And again, it is not that programmers are incapable of quickly acquiring the new skills, but rather that the employers won't give them the chance to do so.

Figure 3. *Information Week* Poll Results



LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Industry lobbyists trumpet the low unemployment rates for programmers, but since people who cannot find programming work leave the field, unemployment statistics are meaningless. The former programmer who cannot find programming work and thus becomes an insurance agent counts in government statistics as an employed insurance seller, not an unemployed programmer.

Amazingly, one is considered "senior" in the programming field if one has merely five years or so of experience — a level typically achieved while one is still less than 30 years old. Table 3 shows some examples of the definitions various firms use for "senior" level, according to their employment Web sites.

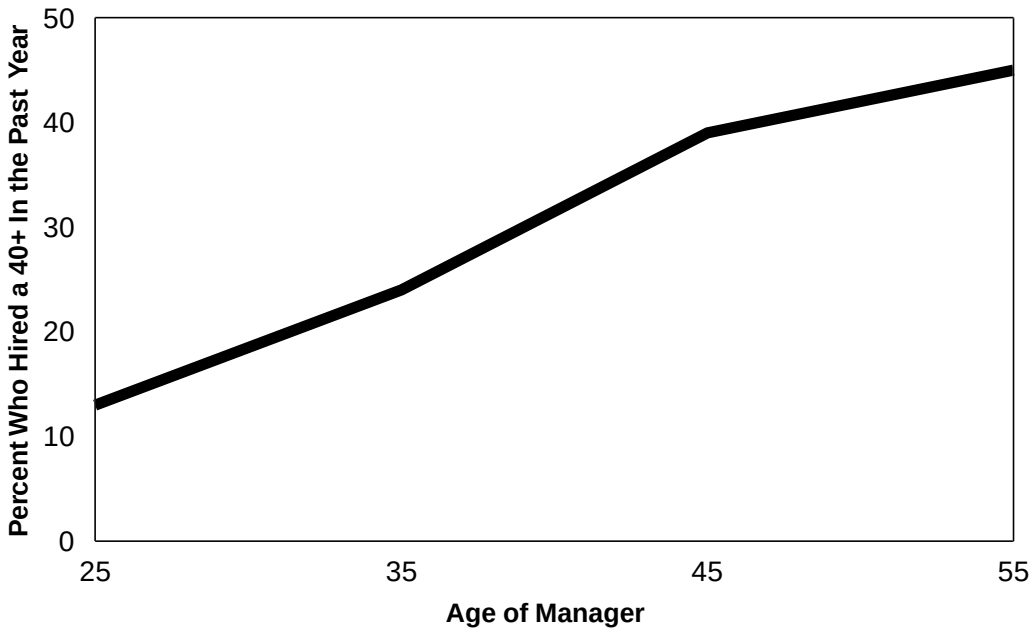
The July 5, 1999 issue of *Information Week* presented a striking illustration of the problems facing older programmers:

> *"It seems safe to say that experience may not be the most valued commodity, according to a survey of 200 IT managers nationwide conducted by Information Week Research in May. Though age wasn't specified in the question, only 2 percent of the managers said they would most likely hire a worker with 10 or more years' experience. Almost half – 46 percent — preferred to hire a worker with four to 10 years' experience, while 26 percent said they would hire a worker with less than three years' experience, and another 26 percent wanted an entry-level worker or recent college graduate.*

An article in *Network World,* September 14, 1998 found even more disturbing results in its reader survey:

> *"Only 13 percent of the 30 survey respondents in the 20-30 age group hired anyone over 40 in the past year, but that percentage increased as the age of the hiring manager increased. Of the 80 network managers in the 31-40 age group, 24 percent had hired an over-40 person in the past year. The percentage rose to 39 percent for the 57 managers in the 41-50 age group and up to 45 percent for the 31 respondents over 50…*
>
> *"The survey results don't surprise Kathy Nichol, who has 18 years' experience as a high-tech recruiter in the Dallas area. Nichol says she works with one thirty-something hiring manager who gravitates toward "young fast-track managers." When Nichol has recommended older workers, her client rejected them, saying the candidate lacked energy, couldn't cut it in a fast-paced environment, or should have been further along careerwise. 'He doesn't even recognize what he's doing,' Nichol says...*
>
> *"Companies don't want to hire older workers for entry-level jobs because they don't want a 40-year-old reporting to a 24-year-old. 'It's a cultural thing,' [Nichol] says. Naturally, the company won't come right out and say age bias is coming into play, but managers will come up with some other reason not to hire that person, she says.*

Figure 4. *Network World* Poll Results



LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

In a 1998 study, American University professor Laura Langbein found that when electrical engineers become unemployed, each additional year of age for those seeking jobs translates into three additional weeks of unemployment.[10] In other words, the job search for a 45-year-old laid-off engineer will take over a year more than it will for a 25-year-old.

Even if all employers were to pay H-1B workers the same wages as U.S. citizens/permanent residents of comparable age, education, skills, and so on, the H-1B program would still be a major cause of age discrimination in this profession; when employers exhaust the supply of young American workers, they will still turn to hiring young foreign workers, instead of hiring older Americans.

Industry lobbyists claim that the U.S. benefits from the H-1B "brain drain" from other countries. What they avoid mentioning is the *American* brain drain due to the H-1B program's forcing older American programmers and engineers to leave the field.

They Just Don't Get It

The current legislative proposals claim they will remedy the problems of salary exploitation of H-1Bs by unscrupulous employers. Though this exploitation does indeed exist and attract attention, the proposals' claimed focus on H-1B wages completely misses the central issues, which are that (a) we don't need the foreign workers and (b) the influx of those workers is causing rampant age discrimination in this field. What needs to be done is to reduce the number of foreign nationals hired by U.S. employers.

Even if all employers were to pay H-1B workers the same wages as U.S. citizens/permanent residents of comparable age, education, skills, and so on, the H-1B program would still be a major cause of age discrimination in this profession; when employers exhaust the supply of young American workers, they will still turn to hiring young foreign workers, instead of hiring older Americans. The fact that the employers might pay the young foreigners the same as the young Americans is irrelevant.

The same point holds for specialized software skills. When U.S. employers run out of domestic programmers who have work experience in, say, the Java programming language, they hire foreign Java programmers, instead of hiring older Americans programmers and giving them a chance to learn Java on the job (which would only take a couple of weeks). The employers are not even willing to hire older Americans programmers who have taken a refresher course in Java. So, the fact that the employers may pay the same wages to a foreign Java programmer as an American one is not the central issue.

None of the legislative proposals takes any action toward a long-term reduction of the industry's use of foreign workers. The fact is that since software technology will continue to change extremely rapidly, and since employers are not willing to hire a veteran programmer who learns a new software skill via coursework, employers have set up a system that guarantees that the claimed/perceived labor "shortage" will be permanent.

Gramm and Lofgren give us the standard line that expanding the IT labor force through education is the long-term solution to the claimed IT labor shortage, a line which is clearly false. Since employers are not hiring the people we already have, as seen for instance in the minuscule 2 percent hiring rates, how could expanding the labor pool possibly be beneficial? On the contrary, expanding the pool would only drive those rates even lower.

Again, the employers themselves ascribe those low hiring rates to the fact that most of the applicants lack the hottest new software skills. But a computer science (CS) graduate's skills go out of fashion just a few years after graduation. Increasing the number of CS graduates (the numbers of which have been skyrocketing anyway) would only serve to increase the number of workers with out-of-date skills.

What to Do

Unless Congress finally is able to resist the huge pressure imposed on it by the industry lobby, the number of foreign programmers and engineers will continue to grow indefinitely, until almost all new programming jobs go to foreign nationals. Strong action should be taken.

Ideally, the yearly quota for the H-1B program would be drastically reduced, say to 15,000 per year. It would be geared mainly to hiring "the best and the brightest," us-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ing standards similar to those now used for the special EB-1 ("National Interest Waiver") green cards for those of outstanding talents. But given that this would probably be a political nonstarter, what else could be done?

One rather simple but possibly quite effective measure would involve a new kind of employer attestation. It would apply to all employers applying for the H-1B, but would impose almost no bureaucratic overhead for them. The employer would be required to attest that he/she had made a good-faith effort to find a U.S. citizen/permanent resident to fill the given job, and that the job requirements were reasonably generic, rather than overly specified, such as requiring specific software skills in the case of programmers. In lieu of supporting documentation demonstrating that good-faith effort, the employer would be required only to state his/her firm's hiring rate for the past year in the general job category in question (programmer, engineer, etc.) This information would be mandated to be conveniently accessible to the public, say on the Department of Labor Web site, and would be auditable in the case of employers who hire more than 25 H-1Bs in a given year.

This simple approach should not be too burdensome (compilation of hiring rates would not be any more difficult that collecting other statistics employers must undergo to comply with various laws and regulations), and could prove to be a powerful disincentive against relying too much on foreign labor. A firm that consistently reported low hiring rates in a job category for which it was hiring many H-1Bs would subject itself to potentially embarrassing publicity in the press, and would be a prime target for age discrimination lawsuits.

If college students see that ever-increasing imports of programmers and engineers are suppressing wage growth and producing age discrimination, the students will "vote with their feet" and study some other field.

Meanwhile, it is in employers' best interests to re-examine their hiring policies. Their current obsession with hiring only those with specific skills is: keeping them from getting the best talent, driving up salaries in those niches of the labor pool corresponding to the hot skills, and causing high turnover rates due to job-hopping among those who have those skills.

If college students see that ever-increasing imports of programmers and engineers are suppressing wage growth (which would happen even under the ideal of pay parity for the H-1Bs, simply due to the swelling of the labor pool) and producing age discrimination, the students will "vote with their feet" and study some other field. Presumably this would be cause for alarm even among open-borders libertarians such as Cypress Semiconductor CEO T.J. Rodgers and Federal Reserve Board chair Alan Greenspan.

The current proposals by Gramm and Lofgren would hurt us all in the long run. Congress should pause for thought and come up with better ideas.

End Notes

1 *The Department of Labor's Foreign Labor Certification Programs: The System is Broken and Needs to be Fixed,* Final Report No. 06-96-002-03-321, Joseph Fisch, Assistant Inspector General for Audit. Available at www.oig.dol.gov/public/reports/oa/1996/alien_cert_semi.htm

2 *San Jose Mercury News*, "Money, Money Everywhere, So Why Don't You Feel Rich?" August 15, 1999. www.mercurynews.com

3 *Red Herring* magazine online, "Vis-a-Visa." August 9, 1999. www.redherring.com

4 *Business Week,* "Is There Really a Techie Shortage?" June 28, 1998. www.businessweek.com

5 *The Wall Street Journal,* June 23, 1998.

6 Citations available at http://heather.cs.ucdavis.edu/itaa.real.html

7 Citations available at http://heather.cs.ucdavis.edu/itaa.real.html

8 *America's New Deficit: The Shortage of Information Technology Workers,* Dept. of Commerce, Fall, 1997. Www.ta.doc.gov/Reports/itsw/itsw.pdf

9 *The Digital Workforce: Building Infotech Skills at the Speed of Innovation,* by Carol Ann Meares and John Sargent, Jr., June 1999. Www.ta.doc.gov/Reports/itsw/digital.pdf

10 IEEE-USA 1998 Unemployment Survey.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

High-Tech Trojan Horse

H1-B Visas and the Computer Industry

During 1998, Congress and President Clinton came under enormous pressure from lobbyists for the computer industry who were demanding an increased quota for the H-1B work visa, under which tens of thousands of computer programmers and other professionals had been imported from abroad each year. The industry touted the increase as a temporary remedy for what they described as a desperate labor shortage. In spite of strong evidence disputing that claim, in October Clinton signed into law legislation implementing a near doubling of the quota during the next three years.

Many observers thought at the time that the H-1B issue would lay dormant for that three-year period. They were surprised when new H-1B legislation was introduced just a few months later, in the summer of 1999, by Sen. Phil Gramm (R-Texas), S.1440, and Rep. Zoe Lofgren (D-Calif.), H.R.2687. Yet these observers should not have been surprised at all; the industry actually had considered the 1998 legislation to be a mere warmup.

This *Backgrounder* examines the high-tech industry's actions and explores the consequences of importing high-tech workers who are not needed.

Support the Center

Through the Combined Federal Campaign

Federal employees can now support the Center's efforts with a donation through the Combined Federal Campaign by designating # 0895 on the campaign pledge card.